

Governor's STEM Advisory Council Regional STEM Network Hub Application

April 6, 2012

Northeast Region

University of Northern Iowa

Name of proposed requesting entity (or entries as partners):

The University of Northern Iowa

Name and title of primary contact:

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Region:

Northeast

Proposed Location:

President Allen and Provost Gibson have stated UNI's Biology Research Complex is available to house Northeast Iowa's STEM Hub (Figure 1). This space is currently available due to the creation of the College of Humanities, Arts, and Sciences (CHAS), and the relocation of the Dean's office for the College of Natural Sciences. The Biology Research Complex (BRC) possesses established office and small conference room as well as storage space for the administrative function of a Regional STEM Hub. In addition, there is a proposal that seeks to transfer some of M. Price Laboratory School's cutting-edge technology infrastructure to the BRC in support of our proposed STEM Hub. This technology transfer would nearly triple the BRC's current wireless communication capabilities (Figure 2). The Biology Research Complex is handicap accessible with parking situated directly adjacent to the building. The building is within easy walking distance of the Center for Energy and Environmental Education which regularly hosts workshops and conferences related to STEM. It is also located near to the Industrial Technology Center and McCollum Science Hall, campus buildings in which a portion of university STEM education is provided.

Identify Your Mission:

Our Mission:

University of Northern Iowa's vision and mission statements -

Vision Statement:

The University of Northern Iowa will be nationally known for innovative education, preparing students for success in a rapidly changing, globally competitive, and culturally diverse world.

Mission Statement:

The University of Northern Iowa provides transformative learning experiences that inspire students to

embrace challenge, engage in critical inquiry and creative thought, and contribute to society.

In addition to these guiding statements, The University of Northern Iowa has at least two goals that drive our motivation to operate a Governor's Regional STEM Hub: UNI Goal 3: Lead the state and nation in pre K-12 education; and UNI Goal 5: Enhance the economic, social, cultural, and sustainable development of the state. Housing the Northeast Iowa Regional STEM Hub at the University of Northern Iowa will be directly compatible with UNI's vision, mission, and goals creating a symbiotic partnership.

Proposed Northeast Iowa STEM Hub Mission statement

The Northeast Iowa STEM Hub will facilitate effective/comprehensive partnerships between private companies, academic settings, local governments, and informal learning centers/groups; These STEM collaborations seek to engage students, develop a skilled work force, and increase STEM literacy throughout Iowa.

Why locate the Northeast Iowa STEM Hub at the University of Northern Iowa?

Top Ten List

- 1. We have over 50 dedicated and passionate STEM research and education leaders ready to share their expertise, time, and connections.
- 2. Our administration (President, Provost, and College Deans) have vowed their support towards strengthening STEM opportunities in our region and our efforts to become an effective STEM Hub.
- 3. We have well-established working relationships with multiple STEM entities, programs, activities, and teachers all over lowa.
- 4. As you will read in this application, UNI has 17 STEM-related centers/programs that are ready to take their efforts to the next level by furthering collaborations with teachers, students, private companies, informal learning centers/clubs/museums, workforce development organizations, business leaders, and regional politicians.
- 5. UNI possesses an excellent infrastructure including: Office of Sponsored Programs, Center for Social and Behavior Research, Business office, Information Technology support, UNI Foundation, etc., that will be necessary to secure additional, private and federal, funding to maximize state tax dollars and ensure that our goals/efforts will be SMART (sustainable, measurable, attainable, realistic, and timely.
- 6. We are already increasing our STEM communication efforts to include a resource and opportunity STEM webpage and social media connectivity through Facebook, Twitter, and YouTube.
- 7. We are eastern lowa's premier source for K-12 teacher STEM professional development opportunities. This will be very important in our efforts towards the transferability of STEM best practices.
- 8. The University of Northern Iowa contains Iowa's Research and Development School and the State's premier Teacher Education Program. These entities will also maximize our Hub's transferability efforts to ensure that all of Iowa's citizens benefit.

- 9. UNI is currently developing a series of summer K-12 STEM camps and academic year afterschool programs that will collaborate with private companies (e.g. John Deere) and informal learning groups/clubs (e.g. 4-H) that greatly increase the visibility of STEM in our region.
- 10. UNI STEM is developing a direct partnerships with the National Mississippi River Museum and Aquarium in Dubuque, Iowa and Northeast Iowa Community College (NICC) and it's Regional Academy for Math and Science (RAMS http://www.go2rams.org). Such symbiotic partnerships will benefit the proliferation of STEM opportunities in NE Iowa and beyond by:
 - A. Uniting the western and eastern portions of the northeast Iowa STEM region;
 - B. Creating exemplary partnerships between formal and informal education;
 - C. Opening doors of collaboration and funding between UNI's STEM expertise and organizations such as, Fishers and Farmers (fishersandfarmers.org), the Network of Iowa's River Museums (www.experiencemississippiriver.com), and 1 Mississippi (1 mississippi.org).

Northeast Iowa Regional STEM Hub @ UNI - Essential activities

Basic Purpose: Collaborate with area businesses, other educational organizations, and non-profit learning centers/groups to engage Northeastern Iowa's teachers and students with meaningful STEM learning opportunities while cultivating STEM literacy throughout Iowa's citizenry.

- 1. The Northeast Iowa STEM Hub Advocate will facilitate the development, implementation, maintenance and promotion of a seamless and collaborative communication system with other Iowa STEM Regions so that there is open and continuous sharing and development of resources, opportunities and promising practices, particularly those that span regions.
- 2. The Hub will create and maintain a comprehensive catalog and asset map of STEM activities and resources within the region to be promoted and shared by:
 - Managing a dedicated website that is comprehensive and contains an easy-to-access STEM database for our region's activities, opportunities, and resources;
 - Managing a social network platform to aid communication and distribution of information and materials (Facebook, Twitter, SchoolTube, Youtube)
 - Increasing accessibility to broad range of STEM educational classroom and field materials.

The following resources will be available to the hub:

University of Northern Iowa

- 1. Center for Teaching and Learning Mathematics (CTLM), http://www.uni.edu/ctlm
- 2. Mathematics Education Lab, http://www.uni.edu/math/facilities/resource_center
- 3. Fabulous Resources for Energy Education (FREE) http://www.uni.edu/free-ceee
- 4. Science Education Resource Center (SERC), http://www.science-ed.edu/serc

- 5. Childhood Development Center (CDC), http://www.uni.edu/cdc
- 6. Center for Energy and Environmental Education (CEEE), http://www.ceee.uni.edu
- 7. Innovative Teaching Technology (ITTC), http://www.uni.edu/infosys/tour/ittc-s
- 8. Center for Social and Behavioral Research (CSBR) http://www.uni.edu/csbr
- 9. Geoinformatics Training, Research, Education, Extension Center (GEOTREE, http://www.geotree.uni.edu
- 10. Iowa Geoscience Education Information Network (IGEIN) http://www.exploreiowageology.org/
- 11. Center for Early Education in Science, Technology, Engineering, and Mathematics (CEESTEM) http://www.uni.edu/coe/special-programs/regents-center-early-developmental-education/ceestem
- 12. IMPacting Achievement with Collaborations and Technology (IMPACT) http://www.uni.edu/ietti/impact/about impact/
- 13. Spotlight on Technology http://www.uni.edu/ietti/spotlite.html
- 14. Iowa Educational Technology and Training Institute http://www.uni.edu/ietti/ietti/ietti.html
- 15. Physics Resources and Instructional Strategies for Motivating Students (PRISMS) http://www.prisms.uni.edu
- 16. Industrial Technology Center, http://www.uni.edu/indtech
- 17. Science Center for Teaching, Outreach, and Research on Meteorology (STORM) http://www.uni.edu/storm
- 3. Be the "voice" of and for STEM in meetings and venues within the Region and convene region-wide dialogs to build awareness, interest and shared beliefs in STEM-related activities and opportunities.

We seek to provide new and innovative STEM opportunities for our region's teachers and students. We will also act as a regional STEM catalyst to create an all-inclusive learning network by developing sustainable bridges between formal and informal education settings, STEM businesses, teachers, students, and families to build an engaging environment.

4. Foster the involvement of businesses in the region to help advance STEM education.

We will increase UNI's efforts to collaborate with regional businesses such as Far Reach Technologies, the Iowa Limestone Producers Association, Rockwell Collins, John Deere, IBM, Cargill, and 3M. These relationships will provide direct knowledge of industry demands/needs, STEM curriculum alignment, and opportunities for research and education partnerships.

5. Inventory and lead discussions of regional gaps and needs and convene key groups and individuals to explore and develop initiatives to address those needs.

The Northeast Iowa STEM Hub, UNI advocate will identify regional gaps in STEM education. He or she will then collaborate with our northeast Iowa STEM Hub Network Partners to address these needs and move STEM education forward.

6. Develop and address Regional STEM Goals through comprehensive Statements of Work and Action Plans based on data and deliverables.

The Northeast Iowa STEM Hub, UNI advocate, in collaboration with its regional partners, will delineate data-driven action plans. These STEM education plans will contain specific and measurable products and outcomes. In addition, we will actively seek out partnerships with the Governor's Executive STEM Council's approved 'Scale-Up' Projects to address our region's current/potential weaknesses (e.g.

curricular, professional development opportunities, access to materials, etc.).

7. Measure and refine all STEM initiatives and goals regionally and contribute to a statewide STEM expansion process.

The Northeast Iowa STEM Hub, UNI advocate, will be responsible for documenting the Governor's STEM Advisory's financial support (internally and externally) and the northeast region's efforts towards increasing STEM participation and education (academic performance and attitude-shifts).

8. The Northeast Iowa STEM Hub will provide guidance and support to entities within its regional network.

Specifically, we will help facilitate regional efforts that integrate STEM initiatives into existing or innovative programs (e.g. curricula, State of Iowa Physics Competition (formally known as "Physics Olympics"), Boy Scouts Geology Badge, 4-H geospatial education efforts, etc. The UNI advocate will work in direct consultation with the Governor's STEM Advisory Council and its established STEM guidelines. This is very important because we must work together to construct a cohesive state-wide STEM-network that is easily transferable throughout formal and informal education settings.

- 9. The Northeast Iowa STEM Hub will help develop and maintain an effective Regional Advisory Council made up of private and public representatives, with guidance from the Governor's STEM Advisory Council, to guide and promote the activities within this Region.
- 10. Develop resources to meet Governor's STEM Advisory Council goals for the Region, including sustainability of the activities of the Regional Advocate.
- 11. Perform other duties as assigned.
 - A. Make sure everyone is on the same page and helping people 'play-well-together'
 - B. Hold weekly conferences with other STEM Regions using Adobe Connect, which will allow digital, audio, and visual sharing of successes and challenges.
 - C. Travel throughout the region and attend pertinent conferences, workshops, meetings,
 - D. Interact with the Governor's STEM Executive Council, and
 - E. Initiate regional STEM contacts with MN, IL, and WI to increase opportunities for broader networking
- 12. Demonstrate accountability quarterly and annually in the form of progress reports to the Regional Network Advisory Council and the Governor's STEM Advisory Council.

Identify Support:

The University of Northern Iowa will fund 50% of the salary of the Hub Advocate; provide physical office space and equipment for the STEM Hub administrative functions, secretarial support and necessary student staff support. UNI will also provide network and email access, parking, and mileage support for the Advocate. If selected as a Hub site, the University would conduct a search for the Advocate and assist in setting up the administrative offices.

Participating Organizations:

We aim to create a truly robust and all-inclusive STEM network for northeast Iowa. The path forward must include input from all STEM stakeholders, so that our endeavors are accessible, effective, and self-

sustaining. The University of Northern Iowa possesses exceptional STEM expertise, resources, and well-established working relationships throughout Iowa with all of the STEM stakeholders. We are the region's premier source for STEM pre-service teacher training and in-service teacher professional development opportunities. The following contains a representative, but not complete, list of people and organizations that are currently engaged in STEM projects with the University of Northern Iowa. Please read the Additional Information section OR (control-click) here to view the UNITE Operational Plan.

Proposed NE Iowa STEM Hub Advisory Members and UNITE Participants - Selection Pool

Area Education Agency -

Roark R. Horn, Chief Administrator (AEA 267)

Melissa Hesner, Science Consultant (AEA 267)

Sandra Ubben, Math Consultant (AEA 267)

Gary Stumberg, Chief Administrator Keystone (AEA 1)

Sue Runyon, Mathematics Consultant, Keystone (AEA 1), Elkader, Iowa

Jason Martin-Hiner, Science Consultant, Keystone (AEA 1)

Joe Crozier, Chief Administrator, Grant Wood AEA

Glenn M Pelecky, Chief Administrator, Mississippi Bend AEA

Nonprofit/informal learning centers -

Jason Dornbush - Grout Museum, Waterloo, Iowa

Mark Wagner Director of Ed. – National Mississippi River Museum & Aquarium

Merle Frommelt - Effigy Mounds National Monument

Craig Johnson – Iowa Academy of Science

Sherman Lundy – Boy Scouts of America

Sarah Eastman – Girl Scouts of America

Diane Wolfe - Black Hawk County 4-H Coordinator

Bill Arndorfer – Black Hawk County AmeriCorps

Nicole Recker – Black Hawk County Boys and Girls Club

John Gile - Dubuque County Boys and Girls Club

Black Hawk County - YWCA

Angi Reid - Silos and Smokestacks (http://www.silosandsmokestacks.org)

Ardelle Brown - American Association of University Women Engineers

Wayne Frost - American Society for Manufacturing Engineers (http://www.sweef.org)

Waterloo Technological Society – Gary Dorhout

Community Colleges -

Northeast Iowa Community College

Terri Rubner and Curt Oldfield, Regional Academy for Math & Science (RAMS), Oelwein, Iowa

Hawkeye Community College

Brittany Jungck (EMC2, Career Academy, Project Lead the Way)

Economic development/Chamber of Commerce –

Northeast Iowa Business Network (http://www.neiabiz.com/)

Eastern Iowa Economic Development Alliance (http://www.chooseeasterniowa.com)

Dave Matt - Business Owner and member of the Cresco Chamber of Commerce.

Steve Dust – Greater Cedar Valley Alliance
UNI's Business and Community Services (http://www.bcs.uni.edu)

County Extension and Outreach -

Bill Arndorfer Black Hawk County, Regional Extension Education Director Brenda Ranum, Fayette County/Region 4 Extension Education Director Bill Petsche, Dubuque Regional Extension Education Director

K-12 student/parent -

Connor Pollock, Dunkerton High School Class of 2013 Gerald Kinney, Dike-New Hartford – Parent of a 4th Grader, John Deere Engineer Heidi Meyers, Parent, 3rd grade teacher, and IMPACT program participant

Business/Industry -

Sherman Lundy – Basic Materials Corporation
Rich White – Iowa Limestone Producers Association
Chad Feldmann, Far Reach Technologies (http://www.farreachinc.com/)
Patrick Barnes - John Deere's Global STEM Program Director
Maureen Hanson - John Deere Engineer, Waterloo
Kristin Simon - Iowa Recycling Association, Cedar Rapids, IA

Private college/university -

Mark McDermott – Science Education, Wartburg College
Jennifer Pothast- Mathematics Education, Wartburg College
Robert Keller – Mathematics and Engineering Loras College
Joyce Becker – Mathematics Education, Luther College
Barb Ehlers – Upper Iowa University, Andres Center for Business and Education

Public University -

Chad Heinzel, UNI, STEM Ed. Committee Chair (http://www.uni.edu/stemed)
Cherin Lee, UNI, Science Education
Doug Hotek, UNI, Coordinator of Technology Education and
Project Lead the Way-Affiliate Director and Pre-Service teacher Training Partner
Joel Haack, UNI, Dean of the College of Humanities, Arts, and Sciences (CHAS)
Ben Allen, UNI, President

Local government (e.g., elected officials) – Jeff Danielson – Iowa State Senator, Cedar Falls Tod Bowman – Iowa State Senator, Maquoketa Jon Crews - C.F. Mayor

Libraries -

Multiple libraries throughout eastern Iowa

STEM teachers -

Dr. Willie Barney, Principle, Waterloo East High School Allysen Lovstuen, Mathematics, Decorah High School Tony Kisch – G.W. Carver Academy, Waterloo, Iowa Heidi Meyers - 3rd grade teacher, MFLMarMac
Tom Fetter - High School Science, West Delaware Schools
Connie Franzen, middle school math teacher, South Winneshiek Schools
Lisa Chizek, 6th grade science teacher, North Tama Schools
Vaughn Gross, high school science, Waterloo East High School
Stacey Jambura, expanded learning, Kingsley Elementary School Waterloo
Frank Strathman, retired high school science, Maquoketa, Iowa

School board members – Dr. James Kenyon – Cedar Falls Marty Hudrlik - Maguoketa

Regional workforce development -

University of Northern Iowa – Center for Regional Business Center - http://www.uni.edu/rbc Region 1 – Allamakee, Chickasaw, Clayton, Delaware, Dubuque, Fayette, Howard, Winneshiek Counties - Region1.Web@iwd.iowa.gov

Region 7 - Black Hawk, Bremer, Buchanan, Butler, Grundy Region7.Web@iwd.iowa.gov

Funding Assistance:

If UNI is granted the honor of serving as the Northeast Iowa STEM, as stated it would be in direct correlation with our mission, vision, and goal statements. Therefore, housing a STEM hub at UNI would not conflict with our regular activities. UNI's Office of Sponsored Projects provides excellent assistance in both finding funding sources and in grant writing and submission. UNI STEM professors and staff have an excellent record with respect to obtaining, operating, and continuing lowa's Title II educational grants. In addition, the UNI Foundation provide excellent support in seeking external funding from private and corporate funding sources.

Specific sources of support and funding linkages (a representative, incomplete list):

Iowa

Upper Exploreland Regional Planning Commission (http://www.uerpc.org)

Iowa Academy of Science (http://www.iacad.org)

Grout Museum, Waterloo (http://www.groutmuseumdistrict.org)

Department of Natural Resources, e.g. IOWATER (http://www.iowadnr.gov/Education)

Iowa Science Center (http://www.sciowa.org)

Eastern Iowa Tourism Association

Iowa Department of Transportation

Federal funding

National Science Foundation (NSF)

National Aeronautics and Space Administration (NASA)

Department of Energy (DOE)

IOWA Experimental Program to Stimulate Competitive Research (EPSCoR)

National Oceanic and Atmospheric Administration (NOAA)

US Army Core of Engineers

US Fish and Wildlife Service (Upper Mississippi River Refuge)

Environmental Protection Agency (EPA)

US Department of Agriculture

Private organizations
Exxon-Mobile
Google
Ford Motor Company
Honda Foundation
Quest Foundation
National Wildlife Federation
The Nature Conservancy
National Science Teachers Association (NSTA)
McElroy Trust
Roy J. Carver Trust

Additional Information:

UNITE for STEM Northeast Iowa Hub Operational Plan

UNITE for STEM is our developing plan that could be implemented by our local advisory council to expedite progress towards realizing the full potential of the Governor's Executive Order 74. Our concept is to have a series of committees that will engage our region with STEM opportunities. Our local advisory council will identify people with specific skills, jobs, and geographic locations to UNITE our region through shared STEM partnerships, opportunities, resources, and expertise.

High Impact Vision Elements

- •Wall Street Journal Headline: STEM in NE Iowa A Not So Rural Project Mercury!
- A united regional STEM effort (public and private) focused on collaborative learning and STEM promotion.
- •Increased retention of the Region's STEM-related graduates.
- •Increased promotion of STEM-related employment opportunities.
- •Scalable awards within the Region transformed into a shared model of best practices.
- Development of national/international best practices partnerships to continually advance the Region's level of STEM programming.
- Recognition of the Region's primary and secondary level STEM education.
- Recognition as the Midwest's preferred destination for graduating science and mathematics educators.

UNITE Operational Plan

The UNITE NE Iowa Regional Hub's organizational structure will be based upon six key committees consisting of the Region's educators, service providers, industry representatives and students. These committee will focus on:

- Existing and Scalable Projects
- •Innovation, Best Practices, Student Interest, and Achievement
- •Economic Development and Workforce
- Regional Funding
- Research and Evaluation
- Hub Organizational Development

These committees will work together to address specific and measurable STEM plans that will be directly aligned with Iowa Governor's STEM Targeted Priorities. After an initial planning period, each workgroup

will meet quarterly. Task groups developed within each committee will carry out identified goals. The UNI HUB advocate will coordinate and facilitate these six committees. The advocate will also be responsible for implementation of plans and for reporting on progress to the Governor's committee. All committee members and government officials will be invited to attend an annual UNITE Regional STEM Conference for recognition of scalable accomplishments, educational sessions, and strategic planning.

Specific Committee Objectives:

STEM Existing Education/Scalable Projects Committee

Objective 1: To heighten the level of STEM collaboration within NE lowa's primary/secondary schools, community colleges, colleges, and universities.

Objective 2: To identify and assist in the selection and review of scalable STEM projects in NE Iowa.

Objective 3: To communicate best practices and finding from selected scalable projects to lowa schools.

1st Year Success Indicators:

- Identification of new and creative partnerships between schools, community colleges, universities, and Area Education Agencies.
- Scheduling of the UNITE STEM Educational Summit

Committee Recruits:

- PreK-12 Teachers (e.g., Early Childhood, Mathematics, Science, Industrial Tech, Ag, Art)
- Community College and College/University Faculty and Organizational Reps.
- Area Education Agency Staff
- Current/Retired Engineers, Researchers, Educators, Healthcare Providers etc.
- High School, Community College, and College/University Student Representatives

Innovation/Best Practices/Student Interest and Achievement Committee

Objective 1: To identify Strengths, Weaknesses, Opportunities, and Threats to aggressively advancing STEM programming within NE Iowa.

Objective 2: To identify, research, and share information on national and international best practices that could/should be undertaken or modified in NE Iowa.

Objective 3: To assist the Hub Advocate in networking with the other Iowa Hubs (5) to share best practices, troubleshoot, and identify new trends that may be impacting Iowa STEM.

Objective 4: To work with the Education Committee to promote regional success and respond to educational opportunities.

1st Year Success Indicators:

- Launching of a social media network for reporting and commenting on STEM Research We Can Use!
- Brief to other UNITE Committees on the NE Iowa STEM SWOT
- Hosting Best Scale-up Practices sessions at the first UNITE STEM Educational Summit

Committee Recruits:

- PreK-12 Teachers (e.g., Mathematics, Science, Industrial Tech, Ag, Art)
- Community College and College/University Faculty and Organizational Reps.
- Area Education Agency Staff
- Current/Retired Engineers, Researchers, Educators, Healthcare Providers etc.
- College/University Librarians
- STEM Business Representatives

Economic Development/Workforce Committee

Objective 1: To support the region's economic development retention and expansion efforts related to STEM.

Objective 2: To promote the Region's STEM related students as an economic development asset to employers.

Objective 3: To enhance the communication between Region's and educational institutions concerning needed workforce skills, employment needs, and internships and other industry/education collaborative opportunities.

1st Year Success Indicators:

- Panel of the Region's economic developers and educators present on the NE Iowa Region's rapid STEM advancements at the Professional Developers of Iowa Annual Conference.
- Majority participation in the Committee's initiative to encourage local development agencies to include specific STEM related goals and objectives in their own strategic plans.

Committee Recruits:

- Economic and Workforce Development Representatives
- Business and Industry Representatives
- Business and Community Service Staff from Educational Institutions

Regional Funding Committee

Objective 1: To identify and pursue grant, foundation, and private sector funding opportunities to support the Region's STEM initiatives and Hub operation.

Objective 2: To identify in kind and financial partnership opportunities within the Region's organizations and institutions.

Objective 3: To oversee/monitor the management and financial reporting of funds related to the Hub's scale-up funds.

1st Year Success Indicators:

- Development of a Regional STEM Funding Plan of Action
- Secure funding for at least one new effort undertake as a result of the NE Hub's operations
- Launching of a social media network for identifying and partnering on STEM related funding opportunities
- Submission of first annual financial report on scalable projects and Hub operation to the Governor's STEM Council

Committee Recruits:

- Regional Councils of Government Representatives
- Community Foundation Representatives
- College/University Foundation Representatives
- Regional Grant Writers
- College/University Grants and Sponsored Programs Staff
- Representatives from the other Hub Committees

Research and Evaluation Committee

Objective 1: To establish and participate in a plan of ongoing HUB program evaluation.

Objective 2: To undertake and/or serve as a resource for quantitative and qualitative research that may be needed within the region for reporting, grant opportunities, and/or overall assessment of the Region's STEM activity.

Objective 3: To monitor evaluation of all scale-up projects funded within the Region.

1st Year Success Indicators:

- Development of a success matrix for the Region's STEM efforts
- Identification of new research opportunities related to STEM programming

Committee Recruits:

- Staff from Research Organizations within Colleges and Universities
- Regional of Councils of Government Representatives
- STEM Researchers

Hub Organizational Development Committee

Objective 1: To promote the overall efforts of the NE Iowa Hub and the Region's STEM accomplishments.

Objective 2: To provide as an advisory team to the Hub Advocate.

Objective 3: To assist in the coordination of Hub related events and functions.

1st Year Success Indicators:

- Identification of, and support to, the Region's first class of scalable projects
- Creation of the Hub's Corp of interns for public relations, marketing, and graphic design

Committee Recruits:

- Representatives from the other Hub Committees
- University Staff

Subject Matter Expertise:

The University of Northern Iowa provides STEM (research, education, and education research) expertise in the following disciplines; Biology, Chemistry, Computer Science, Earth Science, Educational Technology, Energy, Environmental Science, Geology, Mathematics, Physics, and Technology Education.

Within each major STEM field, UNI faculty and staff possess a diverse range of specialized expertise in topics such as inquiry- and project-based learning. In addition to these specialties, many of our experts have extensive experience at aligning STEM and 21st Century curricula with the lowa Core standards.

Additional Considerations:

The following are some of the Letters of Support we have received for our desire to become Northeast Iowa STEM Hub. To view these letters please (ctrl and click) each hyperlink OR visit this webpage - http://www.exploreiowageology.org/UNI STEM Hub.php

Letters of Support for the Northeast Iowa STEM hub @ UNI

- 1. University of Northern Iowa
- 2. John Deere
- 3. Northeast Iowa Community College
- 4. National Mississippi River Museum and Aquarium
- 5. Keystone Area Education Agency
- 6. Area Education Agency 267
- 7. Grout Museum Waterloo, Iowa
- 8. IowaWORKS (Region 7) Center in Waterloo
- 9. Senator Jeff Danielson (verbal support provided April 6th, letter pending)
- 10. Senator Tod Bowman (pending)